Class 345   COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS

Click here to view a PDF version of this file

418	**COMPUTER GRAPHICS PROCESSING**
419	. Three-dimension
420	.. Solid modelling
421	.. Hidden line/surface determining
422	... Z buffer (depth buffer)
423	.. Tessellation
424	.. Voxel
426	.. Lighting/shading
427	.. Space transformation
428	. Adjusting level of detail
581	. Attributes (surface detail or characteristic, display attributes)
582	.. Texture
583	... Solid Texture
584	... Bump map
585	... Non-planar surface
586	... Mathematically defined
587	... MIP map
588	... Repeating pattern
589	.. Color or intensity
590	... Gamut clipping or adjustment
591	... Color processing in perceptual color space
592	... Transparency (mixing color values)
593	... Color selection
594	.... Using GUI
595	.... Expert system or AI
596	... Dither or halftone
597	.... Color
598	..... Spatial
599	.... Spatial
600	... Color bit data modification or conversion
601	.... Using look up table
602	..... Plural look up tables
603	.... Format change (e.g., NTSC to RGB, RGB to composite, XYZ to RGB)
604	.... Color space transformation (e.g., RGB to YUV)
605	.... Change in number of bits for a designated color (e.g., 4 bits to 8 bits, 8 bits to 4 bits)
606	.. Interpolation of attribute values across object surface
607	... In perspective
608	... Tri-linear
609	... Bi-linear
610	... Linear
611	.. Anti-aliasing or image smoothing
612	... Save attributes for each object affecting a given pixel
613	... Subpixel processing
614	... Pixel fragment

615	... Convolving technique
616	... Error diffusion
617	.. Contrast
618	.. Image with abnormal condition
619	. Graphic manipulation (object processing or display attributes)
620	.. Clipping
621	... Based on model of objects
622	.... Testing or using bounding shape (e.g., bounding box sphere)
623	.... Object clipped to view volume
624	.... Object clipped to another object
625	... Based on image data
626	.... Masking
627	.... Non-rectangular array
628	.... Rectangular region
629	.. Merge or overlay
630	... Combining model representations
631	... Reducing redundancy
632	... Placing generated data in real scene
633	.... Augmented reality (real-time)
634	... Image based
635	.... Non-overlapping
636	.... Character and graphics
637	.... Priority based
638	.... Insertion of bitmapped moving picture
639	.... Weighted
640	..... Weights vary across image (e.g., transition from foreground to background)
641	.... Fixed overlay pattern
642	.. Picking
643	.. Arithmetic processing of image data
644	... Matrix calculations
645	... Hierarchy of transformations (e.g., hierarchy of global and local coordinate)
646	.. Morphing
647	.. Distortion
648	.. Affine
649	.. Rotation
650	... Graphical user interface tools
651	.... Alignment functions (e.g., snapping, gravity)
652	.... Constrained manipulations (e.g., movement in less than all dimensions)
653	.... 3D manipulations
654	.... 2D manipulations
655	... Object based
656	... Image based (addressing)
657	.... By arbitrary angle
658	.... By 90 degrees increment
659	.... Image rotates in response to display device orientation
660	.. Scaling
661	... Graphical user interface tools
662	.... Alignment functions (e.g., snapping, gravity)
663	.... Constrained manipulations (i.e., movement in less than all dimensions)
664	.... 3D manipulations
665	.... 2D manipulations
666	... Object based
667	... Image based (addressing)
668	.... By arbitrary ratio
669	.... By integer multiples
670	.... Reduction only
671	.... Enlargement only
672	.. Translation

673	... Averaging technique
674	... Copying data to create additional rows or columns
676	... Graphical user interface tools
677	.... Alignment functions (e.g., snapping, gravity)
678	.... Constrained manipulations (i.e., movement in less than all dimensions)
679	.... 3D manipulations
680	.... 2D manipulations
681	... Object based
682	... Image based (addressing)
683	.... Sprite
684	.... Scrolling
685	..... Alphanumeric
686	..... Memory addressing
687	...... Smooth or continuous
688	..... Attribute changes during scrolling
689	.. Textual entry or display of manipulation information (e.g., enter or display degree of rotation)
440	. Graph generating
440.1	.. Real-time waveform display
440.2	.. Bar graph
441	. Shape generating
442	.. Curve
443	.. Straight line
467	. Character generating
468	.. Character geometry processing
469	... Character generation using control points or hints
469.1	.. Character border
470	.. Generating character fill data from outline data
471	.. Alteration of stored font
472	... Scaling
472.1	.... Reduction only
472.2	.... Enlargement only
472.3	.. Calligraphic
473	. Animation
474	.. Motion planning or control
475	.. Temporal interpolation or processing
700	**OPERATOR INTERFACE (E.G., GRAPHICAL USER INTERFACE)**
701	. Force feedback interaction
702	. Tactile based interaction
703	. Cultural based (including language, time, monetary units displayed)
704	. Playback of recorded user events (e.g., script or macro playback)
705	. Help presentation
706	.. Virtual character or avatar (e.g., animated person)
707	.. Adaptive to user skill level
708	.. Context sensitive
709	... Coaching (e.g., animated examples, or handholding or show me execution)
710	... Input alert
711	... Tool tip (e.g., cursor position based)
712	... Topic roadmap or index
713	.... Hierarchical
714	.. Combining diverse help information (e.g., different sources)
715	.. Balloon or bubble appearance

716	. On screen video or audio system interface
717	.. Multiple diverse systems
718	... Mode switching interface (e.g., switching between TV and computer)
719	.. Video interface
720	... Video traversal control
721	... Indexed control
722	... Video parameter control
723	.. For video segment editing or sequencing
724	... Cut and paste operation
725	... Trimming
726	... Effects or transitions interface
727	. Audio user interface
728	.. Audio input for on-screen manipulation (e.g., voice controlled GUI)
729	.. For a visually challenged user
730	. Presentation to audience interface (e.g., slide show)
731	.. Authoring tool
732	.. Slide manipulating or editing
733	. For plural users or sites (e.g., network)
734	.. Interactive network representation of devices (e.g., topology of workstations)
735	... Configuration
736	... Network managing or monitoring status
737	... User navigation between devices
738	.. Network resource browsing or navigating
739	... Selecting from a resource list (e.g., address book)
740	.. Remote operation of computing device
741	.. Access control or permission
742	... Interactive portal (e.g., secure point of access)
743	... Access rights to interactive controls
744	.. Interface customization or adaption (e.g., client server)
745	... Based on stored usage or user profile (e.g., frequency of use, cookies)
746	... Interface conversion
747	... End user based (e.g., preference setting)
748	. User interactive multicomputer data transfer (e.g., file transfer)
749	.. Downloading remote executables (e.g., Java, CGI)
750	. Multiple users on a single workstation
751	. Computer supported collaborative work between plural users
752	.. Interactive email
753	.. Computer conferencing
754	... Multicursor (e.g., multiple on-screen pointers)
755	... Floor Control
756	... Real Time Video
757	... Virtual 3D environment
758	... Chat room
759	.. Group window
760	. Mark up language interface (e.g., HTML)
761	. Plural adjacent interactive display devices
762	. User interface development (e.g., GUI builder)
763	.. Graphical or iconic based (e.g., visual program)
764	. On-screen workspace or object
765	.. Customizing multiple diverse workspace objects
766	.. Z order of multiple diverse workspace objects
767	.. Focus control of multiple diverse workspace objects
768	.. Translucency or transparency interface element (e.g., invisible control)
769	.. Data transfer operation between objects (e.g., drag and drop)
770	... Cut and paste
771	.. Instrumentation and component modeling (e.g., interactive control panel, virtual device)
772	... Progress or activity indicator

773	... Virtual input device (e.g., virtual keyboard)
774	.. Ticker metaphor
775	.. Office layout metaphor (e.g., filing cabinet, desk)
776	.. Indexed book or notebook metaphor
777	.. Tab metaphor (e.g., property sheet)
778	.. Multiple virtual screen or desktop switching
779	.. Task bar or desktop control panel
780	.. Entry field (e.g., text entry field)
781	.. Window or viewpoint
782	... 3D Perspective view of window layout
783	... On-screen window list or index
784	... Window scrolling
785	.... Autoscroll
786	.... Scroll tool (e.g., scroll bar)
787	..... With content attributes on scroll tool
788	... Layout modification (e.g., move or resize)
789	.... Based on usage or user profile (e.g., frequency of use)
790	.... Overlap control
791	..... Always on top
792	..... Tiling or split pane
793	..... Cascading
794	..... Priority or overlap change (e.g., z-order)
795	...... Minimizing or send to bottom
796	...... Bring to top
797	..... Viewing lower priority windows (e.g., overlapped windows)
798	.... Combining moving and resizing operations (e.g., moving causes resizing)
799	.... Moving (e.g., translating)
800	.... Resizing (e.g., scaling)
801	..... Contained object scale change
802	... Focus control
803	... Window differentiation
804	... Interwindow link or communication
805	.... On-screen link or communication (e.g., cue)
806	... Window memory structure
807	.... Stored priority attribute
808	.. Pop-up control
809	.. Dialog box
810	.. Menu or selectable iconic array (e.g., palette)
811	... Based on usage or user profile (e.g., frequency of use)
812	.... Preselection (e.g., best guess before mouse click)
813	.... Default selection item
814	... Limited time selection opportunity
815	... Sizing modification (e.g., scaling)
816	... Partial input lookup (e.g., partial string lookup)
817	... Context location indication (e.g., previous or next menu item indication)
818	.... Simultaneous next and previous indication (e.g., menu road map)
819	.... Next menu indication
820	.... Previous menu indication
821	... Emphasis
822	.... Preselection emphasis
823	.... Selection or confirmation emphasis
824	.... Unavailable emphasis
825	... Dynamically generated menu items
826	... Add on item (e.g., software developed, customized)
827	... Mnemonic (e.g., accelerator key)
828	... Partial menu display (e.g., one menu item at a time)
829	.... Advancing to next menu item in the same menu
830	..... Scrolling (e.g., spin dial)

831	.... With specific input device
832	... Analog selection style
833	... Slider control
834	... Radial based (e.g., radial or pie menu)
835	... Selectable iconic array
836	.... 3D icons
837	.... Compound or aggregate icon
838	.... Thumbnail or scaled image
839	.... Imitating real life object
840	... Using button array
841	... Sub-menu structure
842	.... Tear off
843	.... Pull down
844	... Timed
845	... Multiple selections in a single menu
846	.. Non-array icons
847	... Shortcut
848	.. Interface represented by 3D space
849	... Individual object
850	... Navigation within 3D space
851	.... On-screen navigation control
852	... Picking 3D objects
853	.. Hierarchy or network structure
854	... Navigation within structure
855	.... On-screen roadmap or index
856	.. Cursor
857	... Pointer direction adjustment
858	... Automatic position adjustment
859	... Status indicator
860	.... Selection emphasis
861	.... Dynamically changed appearance (e.g., animated or live action)
862	... Proximity detection
863	. Gesture-based
864	. For a small display screen (e.g., personal digital assistant, palm-top)
865	. Miscellaneous interface for the handicapped or disabled user
866	. Miscellaneous customization or adaptation
867	**SCREEN SAVER DISPLAY**
156	**DISPLAY PERIPHERAL INTERFACE INPUT DEVICE**
157	. Cursor mark position control device
158	.. Including orientation sensors (e.g., infrared, ultrasonic, remotely controlled)
159	.. Having variable cursor speed
160	.. Cursor key
161	.. Joystick
162	.. Positional storage means
163	.. Mouse
164	... Rotatable ball detector
165	.... Photosensor encoder
166	... Optical detector
167	.. Trackball
168	. Including keyboard
169	.. Portable (i.e., handheld, calculator, remote controller)
170	.. Light source associated with each key
171	.. Having foreign language capability (e.g., Japanese, Chinese)
172	.. Having programmable function key
173	. Touch panel
174	.. Including impedance detection
175	.. Including optical detection
176	.. Transparent substrate having light entrapment capability (i.e., waveguides)

177	.. Including surface acoustic detection
178	.. With alignment or calibration capability (i.e., parallax problem)
179	. Stylus
180	. Light pen for CRT display
181	.. CRT having tracking capability
182	. Light pen for fluid matrix display panel
183	. Light pen for controlling plural light-emitting display elements (e.g., LED, lamps)
184	. Mechanical control (e.g., rotatable knob, slider)
501	**COMPUTER GRAPHIC PROCESSING SYSTEM**
502	. Plural graphics processors
503	.. Coprocessor (e.g., graphic accelerator)
504	.. Master-slave processors
505	.. Parallel processors (e.g., identical processors)
506	.. Pipeline processors
519	. Integrated circuit (e.g., single chip semiconductor device)
520	. Interface (e.g., controller)
522	. Graphic command processing
530	**COMPUTER GRAPHICS DISPLAY MEMORY SYSTEM**
531	. Graphic display memory controller
532	.. Plural memory controllers
533	.. Using different access modes
534	.. Memory access timing signals
535	.. Memory arbitration
536	. Plural storage devices
537	.. Data transfer between memories
538	... Data transfer between system memory display memory
539	.. Double buffered
540	.. Interleaved
541	. Shared memory
542	.. Unified memory architecture (e.g., UMA)
543	. Memory allocation
544	. Memory partitioning
545	. Frame buffer
546	.. Multi-format frame buffer
547	.. Memory for storing video data
548	.. Off-screen memory
549	.. Color memory
550	... Multiple planes
551	.. Character memory
552	. Texture memory
553	. Display list memory
554	. Multi-port memory
555	. For storing compressed data
556	. For storing condition code, flag or status
557	. Cache
558	. First in first out (i.e., FIFO)
559	. Register
560	. Row buffer (e.g., line memory)
561	. Logical operations
562	.. Bit block transfer
563	.. Mask data operation
564	. Addressing
565	.. Using memory for storing address information
566	.. Address manipulation
567	... Using decoding
568	... Address translation (e.g., between virtual and physical addresses)
569	.. For 2D coordinate to linear address conversion
570	.. Page mode

<u>571</u>	. .. Memory addresses arranged in matrix row and column addresses)
<u>572</u>	.. Address generator
<u>573</u>	... Plural address generators
<u>574</u>	... Read/Write address generator
204	**DISPLAY DRIVING CONTROL CIRCUITRY**
<u>205</u>	. Physically integral with display elements
<u>206</u>	.. Having common base or substrate
<u>207</u>	. Light detection means (e.g., with photodetector)
<u>690</u>	. Intensity or color driving control (e.g., gray scale)
<u>691</u>	.. Temporal processing (e.g., pulse width variation over time
<u>692</u>	... Binary weighted
<u>693</u>	... Non-binary weighted
<u>694</u>	.. Spatial processing (e.g., patterns or subpixel configuration)
<u>695</u>	... Subpixels have different shapes
<u>696</u>	... Changing of subpixel location over time
<u>697</u>	.. Including optical means
<u>698</u>	. Adjusting display pixel size or pixels per given area (i.e., resolution)
<u>699</u>	.. Controller automatically senses monitor resolution
<u>208</u>	. Waveform generator coupled to display elements
<u>209</u>	.. Field period polarity reversal
<u>210</u>	.. Having three or more voltage levels
<u>211</u>	. Display power source
<u>212</u>	.. Regulating means
<u>213</u>	.. Synchronizing means
<u>214</u>	. Controlling the condition of display elements
<u>215</u>	.. Including priming means
1.1	**PLURAL DISPLAY SYSTEMS**
<u>1.2</u>	. Data transmitted or received at surface of display
<u>1.3</u>	. Tiling or modular adjacent displays
<u>2.1</u>	. Remotely located
<u>2.2</u>	.. Presentation of similar images
<u>2.3</u>	.. Wireless connection
<u>3.1</u>	. Diverse systems (e.g., CRT or LCD interface)
<u>3.2</u>	.. Frame, field or scan rate conversion
<u>3.3</u>	.. Number of pixels per row or column conversion (i.e., resolution conversion)
<u>3.4</u>	... Controller automatically senses monitor resolution
4	**SINGLE DISPLAY SYSTEM HAVING STACKED SUPERIMPOSED DISPLAY DEVICES (E.G., TANDEM)**
<u>5</u>	. Diverse display devices
<u>6</u>	. Three-dimensional arrays
7	**IMAGE SUPERPOSITION BY OPTICAL MEANS (E.G., HEADS-UP DISPLAY)**
<u>8</u>	. Operator body-mounted heads-up display (e.g., helmet mounted display)
<u>9</u>	. Plural image superposition
10	**DATA RESPONSIVE CRT DISPLAY CONTROL**
<u>11</u>	. CRT provides display control
<u>12</u>	. Data responsive deflection and intensity control
<u>13</u>	. Data responsive deflection control
<u>14</u>	.. X and Y axis deflection control
<u>15</u>	.. Curvilinear deflection control (e.g., lissajous)
<u>16</u>	.. Stroke or vector
<u>17</u>	... Strokes for forming characters
<u>18</u>	... Up/down counter
<u>19</u>	.. Impedance Array
<u>20</u>	. Data responsive intensity control
<u>21</u>	.. Magnetic element array
<u>22</u>	. Color display
<u>23</u>	. Graphic and alphanumeric display
<u>24</u>	. Graphic display

25	. Alphanumeric display
26	.. Character generator
27	. Combined with storage means
28	.. Addressing
29	. Delay line
30	**PLURAL PHYSICAL DISPLAY ELEMENT CONTROL SYSTEM (E.G., NON-CRT)**
31	. Physically movable array
32	. Optical means interposed in viewing path (e.g., filters, lens, etc.)
33	. Segmented display elements
34	.. Seven segment display
35	.. Bar graph
36	... Electroluminescent display elements
37	... Gas discharge display segments (e.g., plasma)
38	... Liquid crystal display segments
39	... Light-emitting diode segments (LEDS)
40	... Plural (e.g., stacked, adjacent)
41	.. Fluid light-emitting display elements (e.g., gas, plasma)
42	... Controlling circuitry
43	.. Mask or electrode shape
44	.. Solid light-emitting display elements
45	... Electroluminescent
46	... Light-emitting diodes
47	.. Fluorescent elements
48	.. Light-controlling display elements
49	... Electrochromic elements
50	... Liquid crystal elements
51	.... Display element selection circuitry
52	.... Power supply generating circuitry
53	.... Specific waveform (e.g., square waveforms, sinusoidal)
54	..... Field period polarity reversal
55	. Display elements arranged in matrix (e.g., rows and columns)
56	.. Image shifting means (i.e., traveling message)
57	... Having endless belt or tape reader
58	.. Crosstalk elimination
59	.. Matrix for conveying alphanumeric data
60	.. Fluid light emitter (e.g., gas, liquid, or plasma)
61	... Shifting means
62	.... Specified plasma coupling path
63	... Intensity control
64	... Liquid light emitter
65	... Phosphor excited by fluid response
66	... Particular discharge path
67	... More than two electrodes per element
68	... Means for combining selective and sustain signals
69	.... Resistor-diode arrangement
70	..... Including transformer
71	... Electrode insulated from fluid medium
72	... Color
73	.. Incandescent
74.1	.. Cathodolulminescent type
75.1	... Vacuum fluorescent
75.2	... Field emissive (e.g., FED, Spindt, microtip, etc.)
76	.. Electroluminescent
77	... Brightness or intensity control
78	... Having compensating pulse
79	... Field period polarity reversal
80	... Driving means integral to substrate
81	... Optical addressing (e.g., photodetection)

82	.. Solid body light emitter (e.g., LED)
83	... Color
84	.. Light-controlling display elements
85	... Electroscopic (e.g., movable electrodes or electrostatic elements)
86	... Magneto-optic
87	... Liquid crystal display elements (LCD)
88	.... Color
89	.... Gray scale capability (e.g., halftone)
90	.... Control means at each display element
91	..... Diode or varistor
92	..... Thin film tansistor (TFT)
93	..... Redundancy (e.g., plural control elements or electrodes)
94	.... Waveform generation
95	..... Three or more voltages
96	..... Field period polarity reversal
97	..... Ferroelectric liquid crystal elements
98	.... Specific display element control means (e.g., latches, memories, logic)
99	..... Particular timing circuit
100	..... Particular row or column control (e.g., shift register)
101	.... Data signal compensation in response to temperature
102	.... Backlight control
103	.... Grouped electrodes (e.g., matrix partitioned into sections)
104	.... Input/output liquid crystal display panel
105	... Electrochromic elements
106	... Thermochromic elements
107	... Particle suspensions (e.g., electrophoretic)
108	.. Plural mechanically movable display elements
109	... Having shutters
110	... With motor or rotor driver means
111	... With a permanent magnet placed on movable display elements

CROSS-REFERENCE ART COLLECTIONS

901	**ELECTRONIC BOOK WITH DISPLAY**
902	**MENU DISPLAY**
903	**MODULAR DISPLAY**
904	**DISPLAY WITH FAIL/SAFE TESTING FEATURE**
905	**DISPLAY DEVICE WITH HOUSING STRUCTURE**
947	**FONT CHARACTER EDGE PROCESSING**
948	**ALTERATION OF STORED FONTS TO MAINTAIN FEATURE CONSISTENCY THROUGHOUT SCALED FONT**
949	**ANIMATION PROCESSING METHOD**
950	. Sprite processing
951	.. Key frame processing
952	. Simulation
953	. Geometric processing
954	.. Quaternions
955	. Morphing
956	. Language driven animation
957	.. Actor
958	. Collision avoidance
959	. Object path adherence
960	. Iterative display of preconfigured images
961	**OPERATOR INTERFACE WITH VISUAL STRUCTURE OR FUNCTION DICTATED BY INTENDED USE**
962	. Operator interface for marketing or sales
963	. Calendar or scheduling

964	. CAD or CAM (e.g., interactive design tools)
965	. For process control and configuration
966	.. Computer process (e.g., operation of computer)
967	... Visual or iconic programming
968	... Interface for database querying and retrieval
969	.. Network layout and operation interface
970	.. Instrumentation and component modelling (e.g., interactive control panel)
970.1	. Amusement or marital aid interface

971	**COOPERATIVE DECISION SUPPORT SYSTEMS FOR GROUPS OF USERS**
972	**INSERTED REAL-TIME VIDEO IN OPERATOR INTERFACE**
973	**SCROLL TOOL (E.G., WINDOW SCROLL BARS)**
974	**SLIDER CONTROLS AS ON-SCREEN OBJECTS IN OPERATOR INTERFACE**
975	**POP-UP DIALOG BOX FOR ENTRY**
976	**3-D ICONS**
977	**DYNAMIC ICON (E.G., ANIMATED OR LIVE ACTION)**
978	**AUDIO INTERACTION AS PART OF AN OPERATOR INTERFACE**

FOREIGN ART COLLECTIONS

FOR000   CLASS-RELATED FOREIGN DOCUMENTS

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collections listed below. These Collections contain ONLY foreign patents or non-patent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

PLURAL PHYSICAL DISPLAY ELEMENT CONTROL SYSTEM (E.G., NON-CRT) (345/30)
. Display elements arranged in matrix (e.g., rows and columns) (345/55)

FOR100   .. Cathodolulminescent type (345/74)

FOR101   ... Vacuum fluorescent (345/75)

FOR102   .. Memory (345/521)

FOR103   . Data manipulation (e.g., masking, interpolation) (345/523)

FOR104   .. Logical operation (345/524)

FOR105   .. Bit block transfer (345/525)

FOR106   . Data transfer between graphic system components (345/526)

FOR107   **DISPLAY STORAGE DEVICE (345/507)**

FOR108   . Color memory (345/186)

FOR109   .. Multiple planes (345/510)

FOR110   ... Addressing with priority (345/188)

FOR111   . Bit map or graphic memory (345/509)

FOR112   .. Addressing (345/515)

FOR113   .. Mask data operation (345/191)

FOR114   . Character memory (345/192)

FOR115   .. Addressing (345/193)

FOR116   .. Character generator (345/194)

FOR117   ... Multiple fonts (345/195)

FOR118   . Row buffer (e.g., line memory) (345/196)

FOR119   . Register (345/513)

FOR120   .. Shift register (345/197)

FOR121   ... With routing logic (345/198)

FOR122   . Color look-up-table (e.g., palette) (345/199)

FOR123   . Addressing circuuuitry (345/516)

FOR124   .. Memory addresses arranged in matrix (e.g., row and column addresses) (345/517)

FOR125   . Plural storage devices (345/508)

FOR126   .. Data transfer between memories (345/511)

FOR127   . Shared memory (345/512)

FOR128   . Condition code, flag, or status (345/514)

FOR129   . Multiple port access (345/518)

FOR130   . Data compression or compaction (345/202)

FOR131   . Significant data assignment in storage device (345/203)

FOR132   **PLURAL DISPLAY SYSTEMS (345/1)**

FOR133   . Remotely located (345/2)

FOR134   . Diverse systems (e.g., CRT/LCD interface) (345/3)

FOR135   **DISPLAY ATTRIBUTE CONTROLLER (345/112)**

FOR136   . Particular overlay (e.g., superimposing feature) (345/113)

FOR137   .. Foreground and background (345/114)

FOR138   . Simultaneous diverse images (345/115)

FOR139   .. Character and graphical display (345/116)

FOR140   . Specified image of abnormal condition (345/117)

FOR141   . Having image confined to designated region (e.g., image clipping) (345/118)

FOR142   . Image movement or position control (e.g., panning) (345/121)

FOR143   .. Scrolling (345/123)

FOR144   ... Alphanumeric (345/124)

FOR145   ... Graphical (345/125)

FOR146   .. Rotation (345/126)

FOR147   . Image size control (345/127)

FOR148   .. Alphanumeric (345/128)

FOR149   ... Reduction (345/129)

FOR150   ... Enlargement (345/130)

FOR151   .. Graphical (345/131)

FOR152   . Defined resolution (e.g., EGA, VGA) (345/132)

FOR153   . Graphic display (345/133)

FOR154   .. Waveform display (e.g., oscilloscope type) (345/134)

FOR155   .. Vector display (345/135)

FOR156   .. With image smoothing control (e.g., anti-aliasing) (345/136)

FOR157   ... Convolving technique (345/137)

FOR158   .. Averaging technique (345/138)

FOR159   .. Perspective (345/139)

FOR160   .. Bar graph (345/140)

FOR161   . Character display (345/141)

FOR162   .. Calligraphic (345/142)

COMPUTER GRAPHICS PROCESSING (345/418)
. Character generating (345/467)
FOR163   .. Character border (345/144)

FOR164   **CURSOR MANIPULATION (345/145)**

FOR165   . Menu selection (345/146)

DISPLAY ATTRIBUTE CONTROLLER (345/112)
FOR166   . Intensity control (e.g., gray scale) (345/147)

FOR167   .. Temporal processing (e.g., pulse width variation over time) (345/148)

FOR168   .. Spatial processing (e.g., patterns or subpixel configurations) (345/149)

FOR169	. Selectable color attributes (345/150)
FOR170	.. Including optical means (345/151)
FOR171	.. Designated subpixel arrangement (345/152)
FOR172	.. Color bit data modification or conversion (345/153)
FOR173	... Format change (e.g., NTSC to RGB, RGB to composite, or XYZ to RGB) (345/154)
FOR174	... Change in number of bits for a designated color (e.g., 4 bits to 8 bits, 8 bits to 4 bits) (345/155)

COMPUTER GRAPHICS PROCESSING (345/418)

FOR175	. Synchronization of diverse media (345/302)

FOR176	**OPERATOR INTERFACE (345/326)**
FOR177	. Interaction in a television environment (345/327)
FOR178	.. For video segment editing or sequencing (345/328)
FOR179	. For plural users or sites (345/329)
FOR180	.. Computer conferencing (345/330)
FOR181	.. Computer supported cooperative work (345/331)
FOR182	... Group window (345/332)
FOR183	. Interface customization or edition (345/333)
FOR184	.. Graphical appearance (345/334)
FOR185	.. Link between object and task or function (e.g., client/server) (345/335)
FOR186	. Having on-line help (345/336)
FOR187	.. Adaptive to user skill level (345/337)
FOR188	.. Context sensitive (345/338)
FOR189	. On-screen workspace or object (345/339)
FOR190	.. Window (345/340)
FOR191	... Window scrolled to needed portion (345/341)
FOR192	... Layout modification (e.g., move or resize) (345/342)
FOR193	... Window differentiation (345/343)
FOR194	.... Priority (345/344)
FOR195	..... Viewing lower priority window (345/345)
FOR196	... Interwindow link or communication (345/346)

FOR197   .. Pop-up control (e.g., message or dialog box) (345/347)

FOR198   .. Icon (345/348)

FOR199   ... Metaphoric icon object (345/349)

FOR200   .... Indexed book or notebook (345/350)

FOR201   .... Office layout (e.g., filing cabinet, desk) (345/351)

FOR202   .. Menu (345/352)

FOR203   ... Sub-menu structure (345/353)

FOR204   ... Using button array (345/354)

FOR205   .. Interface represented by 3D space (345/355)

FOR206   .. Hierarchy or network structure (345/356)

FOR207   ... Navigation within structure (345/357)

FOR208   . Gestured-based (345/358)

COMPUTER GRAPHICS PROCESSING (345/418)
. Three-dimension (345/419)
FOR209   .. Mapping image onto surface of 3D object (345/425)

FOR210   . Surface detail/characteristic (345/429)

FOR211   .. Texture (345/430)

FOR212   .. Color (345/431)

FOR213   .. Intensity (345/432)

FOR214   . Object processing (345/433)

FOR215   .. Clipping (345/434)

FOR216   .. Merge/overlay (345/435)

FOR217   .. Affine (345/436)

FOR218   .. Rotation (345/437)

FOR219   .. Translation (345/438)

FOR220   .. Sealing (345/439)

This file produced by USPTO - SIRA - Office of Patent Automation - ReferenceTools Project. Questions or comments relating to this file should be directed to Patent Automation Feedback.

Intranet Home | Index | Resources | Contacts | Internet | Search | Firewall | Web Services

L Number	Hits	Search Text	DB	Time stamp
1	350	"ATI Technologies"	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 12:32
2	0	"ATI Technologies" and "single video card"	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 12:27
3	5	"ATI Technologies" and (video adj card)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 12:27
4	140	(monitor or display) near (graphics adj processor)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 12:40
5	0	((multiple or plural) adj (monitors or displays)) near (graphics adj processor)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 13:48
6	16704	709/$.ccls.	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 13:48
9	0	(709/$.ccls. and (port near6 (ip same address))) and (plural adj devices)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 13:50
7	570	709/$.ccls. and (port near6 (ip same address))	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 13:58
10	405	(709/$.ccls. and (port near6 (ip same address))) and (displays or monitors)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 14:20
11	133	(709/$.ccls. and (port near6 (ip same address))) and ((plural or multiple or several) near6 (devices or displays or monitors or screens))	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 14:30
13	6	((709/$.ccls. and (port near6 (ip same address))) and ((plural or multiple or several) near6 (devices or displays or monitors or screens))) and (display? near control)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 14:31

L Number	Hits	Search Text	DB	Time stamp
1	350	"ATI Technologies"	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 12:32
2	0	"ATI Technologies" and "single video card"	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 12:27
3	5	"ATI Technologies" and (video adj card)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 12:27
4	140	(monitor or display) near (graphics adj processor)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 12:40
5	0	((multiple or plural) adj (monitors or displays)) near (graphics adj processor)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 13:48
6	16704	709/$.ccls.	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 13:48
9	0	(709/$.ccls. and (port near6 (ip same address))) and (plural adj devices)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 13:50
7	570	709/$.ccls. and (port near6 (ip same address))	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 13:58
10	405	(709/$.ccls. and (port near6 (ip same address))) and (displays or monitors)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 14:20
11	133	(709/$.ccls. and (port near6 (ip same address))) and ((plural or multiple or several) near6 (devices or displays or monitors or screens))	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 14:30
13	6	((709/$.ccls. and (port near6 (ip same address))) and ((plural or multiple or several) near6 (devices or displays or monitors or screens))) and (display? near control)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/22 14:31
-	115	345/760	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 15:20
-	353	345/733	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:38

-	39	345/740	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:38
-	86	345/771	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:38
-	228	345/1.1	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:38
-	135	345/2.1	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:39
-	3253	709/203	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:39
-	864	345/760 or 345/733 or 345/740 or 345/771 or 345/1.1 or 345/2.1	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:40
-	809	(345/760 or 345/733 or 345/740 or 345/771 or 345/1.1 or 345/2.1) and displays	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:41
-	331	((345/760 or 345/733 or 345/740 or 345/771 or 345/1.1 or 345/2.1) and displays) and (internet or web)	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:42
-	301	(((345/760 or 345/733 or 345/740 or 345/771 or 345/1.1 or 345/2.1) and displays) and (internet or web)) and control	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:42
-	237	((((345/760 or 345/733 or 345/740 or 345/771 or 345/1.1 or 345/2.1) and displays) and (internet or web)) and control) and server	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:51
-	41	(((((345/760 or 345/733 or 345/740 or 345/771 or 345/1.1 or 345/2.1) and displays) and (internet or web)) and control) and server) and touch	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:51
-	3	((((((345/760 or 345/733 or 345/740 or 345/771 or 345/1.1 or 345/2.1) and displays) and (internet or web)) and control) and server) and touch) and kiosk	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:54
-	1	((((((345/760 or 345/733 or 345/740 or 345/771 or 345/1.1 or 345/2.1) and displays) and (internet or web)) and control) and server) and touch) and fuel	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 09:58

-	37	709/203 and fuel	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 10:22
-	1	(709/203 and fuel) and (fuel adj dispenser)	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 11:36
-	73	(internet or web) and (fuel adj dispenser)	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 11:48
-	49853	(internet or web) and (gas or gasoline or gazoline)	USPAT; EPO; JPO; DERWENT; USOCR	2002/12/16 11:49
-	306	unique adj ip adj address	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/19 12:22
-	0	(unique adj port adj address) and (unique adj ip adj address)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/19 12:05
-	20	unique adj port adj address	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/19 12:05
-	283	(unique adj ip adj address) and internet	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/19 12:22
-	23	((unique adj ip adj address) and internet) and (port adj address)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/19 17:01
-	19	"5721906"	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/19 17:01
-	52365	345/$.ccls.	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 15:20
-	0	(345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station)) and (static adj addressing)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 15:22
-	0	(345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station)) and (dynamic adj addressing)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 15:23

-	0	(345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station)) and (port adj addressing)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 15:23
-	0	(345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station)) and (ip adj addressing)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 15:23
-	60	345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 16:22
-	0	(345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station)) not (345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/21 15:39
-	45	345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/21 15:39
-	27666	709/$.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/21 15:40
-	31	709/$.ccls. and ((fuel or gas or gaz or gasoline or gazoline) adj (dispenser or dispensor or pump))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/08/21 15:43
-	52	345/$.ccls. and (fuel or gas or gaz or gasoline or gazoline) adj (dispenser or dispensor or pump or station)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 16:23
-	7	(345/$.ccls. and (fuel or gas or gaz or gasoline or gazoline) adj (dispenser or dispensor or pump or station)) not (345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station))	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 16:27

-	79	(709/$.ccls. and ((fuel or gas or gaz or gasoline or gazoline) adj (dispenser or dispensor or pump))) or (345/$.ccls. and (fuel or gas or gaz or gasoline or gazoline) adj (dispenser or dispensor or pump or station)) or ((345/$.ccls. and (fuel or gas or gaz or gasoline or gazoline) adj (dispenser or dispensor or pump or station)) not (345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station))) or (345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station)) or (345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station))	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 16:28
-	20	((709/$.ccls. and ((fuel or gas or gaz or gasoline or gazoline) adj (dispenser or dispensor or pump))) or (345/$.ccls. and (fuel or gas or gaz or gasoline or gazoline) adj (dispenser or dispensor or pump or station)) or ((345/$.ccls. and (fuel or gas or gaz or gasoline or gazoline) adj (dispenser or dispensor or pump or station)) not (345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station))) or (345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station)) or (345/$.ccls. and (fuel or gas or gaz or gosoline or gazoline) adj (dispenser or dispensor or pump or station))) and ((dynamic adj addressing) or (static addressing))	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 16:36
-	31	709/$.ccls. and (dynamic adj addressing)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 17:20
-	0	(709/$.ccls. and (dynamic adj addressing)) and (display adj controller)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 17:21
-	45	kiosk and (display adj controller)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 17:28
-	1303030	"45" and ((multiple or plural) adj displays)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 17:23

-	507	"45" and (multiple adj displays)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 17:23
-	2	(kiosk and (display adj controller)) and ((multiple or plural) adj displays)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 17:24
-	5690	((multiple or plural) adj (displays or screens)) and ((display or screen adj controller))	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 17:34
-	0	(((multiple or plural) adj (displays or screens)) and ((display or screen adj controller))) and kiosk	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 17:35
-	90	(((multiple or plural) adj (displays or screens)) and ((display or screen adj controller))) and fuel	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 17:44
-	5690	(((multiple or plural) adj (displays or screens)) and ((display or screen adj controller))) and ((single display controller) or (single screen controller))	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 18:01
-	8	(((multiple or plural) adj (displays or screens)) and ((display or screen adj controller))) and ("single display controller" or "single screen controller")	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 19:01
-	28	5488385.URPN.	USPAT	2003/08/21 18:26
-	16	5038301.URPN.	USPAT	2003/08/21 18:50
-	1	duet and virge	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 19:01
-	19	"5038301"	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 19:17
-	1715	kiosk and displays	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 19:30
-	28	(kiosk and displays) and ((multiple or plural) adj (screens or displays))	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 20:14
-	463	vga adj controller	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 20:16

-	16	(vga adj controller) and (multiple adj displays)	USPAT; EPO; JPO; DERWENT; USOCR	2003/08/21 20:17